NewsRelease

National Aeronautics and Space Administration

Langley Research Center

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Media Advisory:

NASA Researchers Sled in Summer

9:15A.M., Wednesday, July 18

Imagine a huge metal sled zooming 230 miles an hour down a concrete runway.

It's not a new theme park thrill ride, but a test of tires developed to stand up under the weight and stresses of the space shuttle.

Engineers at NASA's Langley Research Center in Hampton are using the fastest water-powered sled in the world to evaluate newly redesigned tires aimed at increasing the shuttle's load capability by 20 percent.

Researchers at Langley's Aircraft Landing Dynamics Facility are testing different tire structures and tread patterns to see if manufacturers can make a shuttle tire that is more maneuverable, less subject to wear and can handle more than 170,000 pounds of weight each.

Among the issues engineers will consider is how the various designs perform on wet runways with different kinds of pavement. The preferred landing site for shuttle orbiters, the Kennedy Space Center at Cape Canaveral, Fla., has a grooved runway surface. The primary alternate landing area at Edwards Air Force Base in Edwards, Calif., has a smooth runway.

Come to the Aircraft Landing Dynamics Facility and see how the tires react to the speed and heat. Feel the ground shake as the sled completes its run. Talk to a NASA engineer about how important these tests are to the safety of the space shuttle (and why you should pay special attention to your own car tires).

Please arrive at the NASA Langley main gate at the end of Commander Shepard Blvd. by 9 a.m. for the test.